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FLOOD INSURANCE STUDY

COMPLETED

STE. GENEVIEVE COUNTY, MISSOURI

UNINCORPORATED AREAS

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REVISED:

OCTOBER 18, 1988

ORIGINAL

Federal Emergency Management Agency

COMMUNITY NUMBER - 290833

NOTICE TO
FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program have established repositories of flood hazard data for floodplain management and flood insurance purposes. This Flood Insurance Study may not contain all data available within the repository. It is advisable to contact the community repository for any additional data.

This publication incorporates revisions to the original Flood Insurance Study. These revisions are presented in Section 9.0.

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Flood Boundary and Floodway Map

FLOOD INSURANCE STUDY

STE. GENEVIEVE COUNTY,
UNINCORPORATED AREAS,
MISSOURI

1.0 INTRODUCTION

1.1 Purpose of Study

This Flood Insurance Study investigates the existence and severity of flood hazards in the Unincorporated Areas of Ste. Genevieve County, Missouri, and aids in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This study has developed flood risk data for various areas of the community that will be used to establish actuarial flood insurance rates and assist the community in its efforts to promote sound flood plain management. Minimum flood plain management requirements for participation in the National Flood Insurance Program are set forth in the Code of Federal Regulations at 44 CFR, 60.3.

In some states or communities, flood plain management criteria or regulations may exist that are more restrictive or comprehensive than the minimum Federal requirements. In such cases, the more restrictive criteria take precedence and the state (or other jurisdictional agency) will be able to explain them.

This Flood Insurance Study was prepared by compiling existing hydrologic and hydraulic technical and scientific data prepared originally for purposes other than the National Flood Insurance Program. The data were identified as the best available at the time of compilation of this Flood Insurance Study and should depict the general conditions of the flooding sources with relative accuracy. The Federal Emergency Management Agency (FEMA) performed a cursory review and accepted the data as valid for purposes of this Flood Insurance Study and the National Flood Insurance Program. However, if better information is known to exist or has been developed since the date of this report, the information should be immediately forwarded to the Natural and Technological Hazards Division, FEMA, Kansas City, Missouri, for consideration for revision of this study.

1.2 Authority and Acknowledgments

The sources of authority for this Flood Insurance Study are the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973.

The hydrologic and hydraulic analyses for this study were obtained from "Upper Mississippi River Water-Surface Profiles, River Mile 0.0 to River Mile 847.5" and "Flood Plain Information, Ste. Genevieve, Missouri, Mississippi River, North and South Gabouri Creeks" (References 1 and 2).

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1.3 Coordination

On May 14, 1986, the results of this Flood Insurance Study were reviewed and accepted at a final coordination meeting attended by representatives of the community and FEMA.

2.0 AREA STUDIED

2.1 Scope of Study

This Flood Insurance Study covers the unincorporated areas of Ste. Genevieve County, Missouri. The area of study is shown on the Vicinity Map (Figure 1). The incorporated areas within the county were excluded from this study.

The areas studied by detailed methods were selected based upon the extent and validity of available existing hydrologic and hydraulic data.

Flooding caused by overflow of the Mississippi River and North Gabouri Creek, from the western corporate limit of the City of Ste. Genevieve to about 1.9 miles upstream of the corporate limits, and South Gabouri Creek, from U.S. Highway 61 to about 2.0 miles upstream of U.S. Highway 61, was studied in detail.

Approximate methods of analysis were used to study all remaining areas having a potential flood hazard that did not have detailed scientific or technical data available.

2.2 Community Description

Ste. Genevieve County is located on the eastern border of central Missouri, about 50 miles south of St. Louis. It is bounded on the north by Jefferson County, on the west by St. Francois County, on the south by Perry County, and on the east by Monroe and Randolph Counties, Illinois, and the Mississippi River. The major transportation routes through the county are Interstate Highway 55, U.S. Highway 61, and State Highways 32 and 144. The Missouri Pacific Railroad and the Burlington Northern railroad also pass through the county. The 1980 population of Ste. Genevieve County was reported to be 15,180 (Reference 3).

Winters in Ste. Genevieve County are brisk but seldom severe. The maximum day temperature remains below freezing an average of 25 days or less per year. The summers are humid. A maximum day temperature of 90 degrees Fahrenheit or higher occurs on an average of 35 to 40 days per year. Annual precipitation averages approximately 37 inches in the St. Louis area. Monthly precipitation will vary from approximately 1.5 inches per month in December, January, and February to 4.5 inches per month in May, June, and September (Reference 4). Snowfall averages less than 20 inches per winter season and the average frost penetration depth is 15 inches. From April through September, rainfall is produced principally from showers and thunderstorms. These are of a localized nature and occur most frequently in the late afternoon and early evening. They are usually of brief duration; however, the associated rainfall may be intense, measuring up to several inches in a short period (Reference 5).

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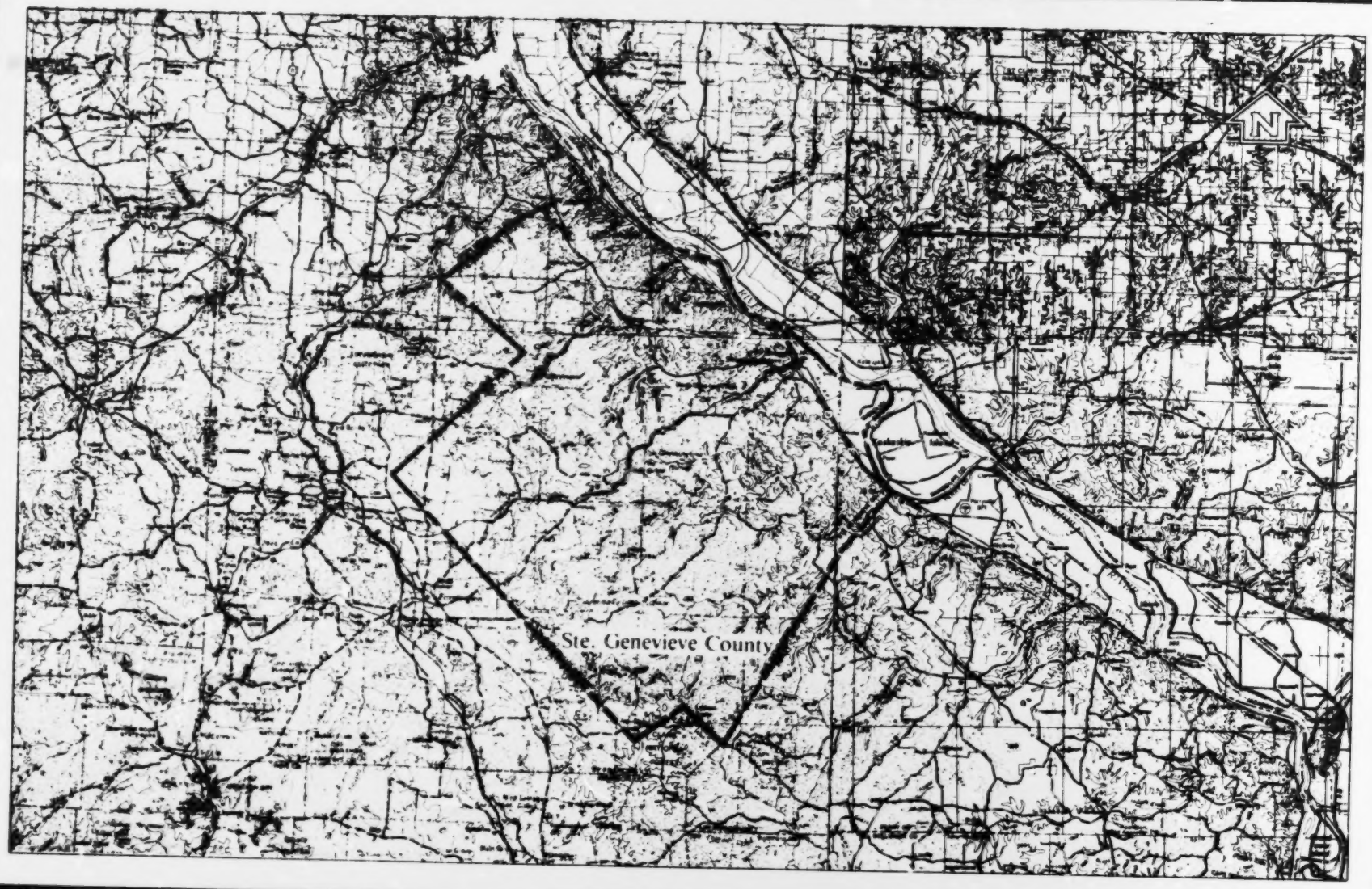

FIGURE 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

STE. GENEVIEVE COUNTY, MO
(UNINCORPORATED AREAS)

APPROXIMATE SCALE

8 0 8 16 24 MILES

VICINITY MAP

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2.3 Principal Flood Problems

Flooding in Ste. Genevieve County is a result of overflow from the Mississippi River and various tributary streams throughout the county.

Flooding from the Mississippi River generally occurs in the spring and early summer months and is usually caused by melting snow and extensive rainfall over the watershed. Major floods from the Mississippi River occurred in 1785, 1844, 1903, 1927, 1944, 1951, 1969, 1973, 1982, and 1983.

Flooding on North and South Gabouri Creeks results from heavy rainfall in the river basins and from the Mississippi River backwater.

2.4 Flood Protection Measures

Flood protection measures do not exist within the study area.

3.0 ENGINEERING METHODS

For the flooding sources studied in detail in the community, standard hydrologic and hydraulic study methods were used to determine the flood hazard data required for this study. Flood events of a magnitude that are expected to be equaled or exceeded once on the average during any 10-, 50-, 100-, or 500-year period (recurrence interval) have been selected as having special significance for flood plain management and for flood insurance rates. These events, commonly termed the 10-, 50-, 100-, and 500-year floods, have a 10, 2, 1, and 0.2 percent chance, respectively, of being equaled or exceeded during any year. Although the recurrence interval represents the long-term average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when periods greater than 1 year are considered. For example, the risk of having a flood that equals or exceeds the 100-year flood (1 percent chance of annual exceedence) in any 50-year period is approximately 40 percent (4 in 10), and, for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported herein reflect flooding potentials based on conditions existing in the community at the time of completion of this study. Maps and flood elevations will be amended periodically to reflect future changes.

3.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish the peak discharge-frequency relationships for each riverine flooding source studied in detail affecting the community.

Floodflow frequency data for the Mississippi River were developed through analyses of stream and rainfall gage records (Reference 6).

Peak discharges for North and South Gabouri Creeks were developed by rainfall frequency analysis based on the U.S. National Weather Service Technical Paper No. 40 (Reference 7) using the U.S. Army Corps of Engineers (COE) HEC-1 computer program (Reference 8).

Peak discharges for the 10-, 50-, 100-, and 500-year floods of each flooding source studied in detail in the community are shown in Table 1.

TABLE 1 - SUMMARY OF DISCHARGES

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (SQ MILES)	PEAK DISCHARGE (CFS) 10-YEAR	50-YEAR	100-YEAR	500-YEAR
MISSISSIPPI RIVER at River Mile 175	701,000	690,000	925,000	1,020,000	1,300,000
NORTH GABOURI CREEK at Burlington Northern Railroad	8.6	4,500	N/A	6,600	N/A
SOUTH GABOURI CREEK at U.S. Highway 61	5.3	2,900	N/A	4,200	N/A

3.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of flooding from the sources studied were carried out to provide estimates of the elevations of floods of the selected recurrence intervals.

Bridge and valley cross sections for North and South Gabouri Creeks were obtained by field surveys.

Starting water-surface elevations for North and South Gabouri Creeks were based on normal depth analysis. Water-surface elevations for the 100-year flood were computed using the COE HEC-2 computer program (Reference 9). The 10-year flood profiles for North and South Gabouri Creeks were extrapolated from data contained in the Flood Insurance Study for the City of Ste. Genevieve (Reference 10) and were used for zone determinations only. Profiles for the Mississippi River were obtained from the COE report (Reference 1).

Flood profiles were drawn showing the computed water-surface elevations for floods of the selected recurrence intervals. In cases where the 50- and 100-year flood elevations are close together, due to limitations of the profile scale, only the 100-year profile has been drawn.

The hydraulic analyses for this study are based only on the effects of unobstructed flow. The flood elevations shown on the profiles are, thus, considered valid only if hydraulic structures remain unobstructed, operate properly, and do not fail.

All elevations are referenced to the National Geodetic Vertical Datum of 1929 (NGVD).

4.0 FLOOD PLAIN MANAGEMENT APPLICATIONS

The National Flood Insurance Program encourages state and local governments to adopt sound flood plain management programs. Therefore, each Flood Insurance Study produces maps designed to assist communities in developing flood plain management measures.

4.1 Flood Boundaries

To provide a national standard without regional discrimination, the 1 percent annual chance (100-year) flood has been adopted by FEMA as the base flood for flood plain management purposes. The 0.2 percent annual chance (500-year) flood is employed to indicate additional areas of flood risk in the community. For each stream studied in detail, the 100- and 500-year flood plain boundaries have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated using topographic maps at a scale of 1:24000 with a contour interval of 20 feet (Reference 11).

For the streams studied by approximate methods, only the 100-year flood plain boundary was delineated using the Flood Hazard Boundary Map for Ste. Genevieve County (Reference 12).

Flood plain boundaries are indicated on the Flood Insurance Rate Map. On this map, the 100-year flood plain boundary corresponds to the boundary of the areas of special flood hazards (Zone A and numbered A zones) and the 500-year flood plain boundary corresponds to the boundary of areas of moderate flood hazards (Zone B). In cases where the 100- and 500-year flood plain boundaries are close together, only the 100-year flood plain boundary has been shown. Small areas within the flood plain boundaries may lie above the flood elevations but cannot be shown due to limitations of the map scale and/or lack of detailed topographic data.

The floodway is the channel of a stream plus any adjacent flood plain areas that must be kept free of encroachment so that the 100-year flood can be carried without substantial increases in flood heights. A floodway is not shown for the entire reach of the Mississippi River due to lack of cross-section data necessary to compute a conveyant floodway. A floodway was not computed for North and South Gabouri Creeks.

5.0 INSURANCE APPLICATION

To establish actuarial insurance rates, data from the engineering study must be transformed into flood insurance criteria. This process includes the determination of reaches, Flood Hazard Factors, and flood insurance zone designations for each flooding source studied in detail affecting Ste. Genevieve County.

5.1 Reach Determinations

Reaches are defined as sections of flood plain that have relatively the same flood hazard, based on the weighted average difference in water-surface elevations between the 10- and 100-year floods. This difference may not have a variation greater than that indicated in the following table for more than 20 percent of the reach:

Average Difference Between 10- and 100-year Floods	Variation
Less than 2 feet	0.5 foot
2 to 7 feet	1.0 foot
7.1 to 12 feet	2.0 feet
More than 12 feet	3.0 feet

The locations of the reaches determined for the riverine flooding sources of Ste. Genevieve County are shown on the Flood Profiles and summarized in Table 2, Flood Insurance Zone Data.

5.2 Flood Hazard Factors

The Flood Hazard Factor (FHF) is used to establish relationships between depth and frequency of flooding in any reach. This relationship is then used with depth-damage relationships for various classes of structures to establish actuarial insurance rate tables.

The FHF for a riverine reach is the weighted average difference between the 10- and 100-year flood water-surface elevations rounded to the nearest 0.5 foot, multiplied by 10, and shown as a 3-digit code. For example, if the difference between elevations is 0.7 foot, the FHF is 005; if the difference is 1.4 feet, the FHF is 015; if the difference is 5.0 feet, the FHF is 050. When the difference is greater than 10.0 feet, it is rounded to the nearest whole foot.

5.3 Flood Insurance Zones

Flood insurance zones and zone numbers are assigned based on the type of flood hazard and the FHF, respectively. A unique zone number is associated with each possible FHF and varies from 1 for a FHF of 005 to a maximum of 30 for a FHF of 200 or greater.

Zone A:	Special Flood Hazard Areas inundated by the 100-year flood, determined by approximate methods; no base flood elevations are shown or FHFs determined.
Zones A2, A3, A18, A20:	Special Flood Hazard Areas inundated by the 100-year flood, with base flood elevations shown, and zones subdivided according to FHFs.
Zone B:	Areas between the Special Flood Hazard Areas and the limits of the 500-year flood; areas that are protected from the 100- and 500-year floods by dike, levee, or other water control structure; areas subject to certain types of 100-year shallow flooding where depths are less than 1.0 foot; and, areas subject to 100-year flooding from sources with drainage areas less than 1 square mile. Zone B is not subdivided.
Zone C:	Areas of minimal flooding; not subdivided.

Flood elevation differences, FHFs, flood insurance zones, and base flood elevations for each flooding source studied in detail in the community are summarized in Table 2, Flood Insurance Zone Data.

FLOODING SOURCE	PANEL[1]	ELEVATION DIFFERENCE[2] BETWEEN 1.0% (100-YEAR) FLOOD AND			FLOOD HAZARD FACTOR	ZONE	BASE FLOOD ELEVATION[3] (FEET NGVD)
		10% (10-YEAR)	2% (50-YEAR)	0.2% (500-YEAR)			
MISSISSIPPI RIVER							
REACH 1[4]	0075,0150	−10.0	−3.5	1.8	100	A20	VARIES—SEE MAP
REACH 2	0025,0050,0075	−8.8	−2.9	2.6	090	A18	VARIES—SEE MAP
NORTH GABOURI CREEK							
REACH 1	0075	−1.7	N/A	N/A	015	A3	VARIES—SEE MAP
SOUTH GABOURI CREEK							
REACH 1	0075	−0.8	N/A	N/A	010	A2	VARIES—SEE MAP

[1]FLOOD INSURANCE RATE MAP PANEL
[2]WEIGHTED AVERAGE
[3]ROUNDED TO NEAREST FOOT
[4]DATA FOR THIS REACH TAKEN FROM RANDOLPH COUNTY, ILLINOIS FIS

TABLE 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

STE. GENEVIEVE COUNTY, MO

(UNINCORPORATED AREAS)

FLOOD INSURANCE ZONE DATA

MISSISSIPPI RIVER—NORTH GABOURI CREEK—SOUTH GABOURI CREEK

5.4 Flood Insurance Rate Map Description

The Flood Insurance Rate Map for Ste. Genevieve County is, for insurance purposes, the principal product of the Flood Insurance Study. This map contains the official delineation of flood insurance zones and base flood elevation lines. Base flood elevation lines for riverine flooding sources show the locations of the expected whole-foot water-surface elevations of the base (100-year) flood. The base flood elevations and zone numbers are used by insurance agents, in conjunction with structure elevations and characteristics, to assign actuarial insurance rates to structures and contents insured under the National Flood Insurance Program.

6.0 OTHER STUDIES

Flood Insurance Studies have been published for the Cities of Ste. Genevieve and St. Marys, Ste. Genevieve County, and the Unincorporated Areas of Jefferson County, Missouri, and are in agreement with this study (References 10, 13, and 14).

Flood Insurance Studies for the Unincorporated Areas of Monroe and Randolph Counties, Illinois, are in progress (References 15 and 16). The results therein match this study.

Due to its more detailed analysis, this Flood Insurance Study supersedes the previously printed Flood Hazard Boundary Map for Ste. Genevieve County (Reference 12).

7.0 LOCATION OF DATA

Information concerning the pertinent data used in the preparation of this study can be obtained by contacting the Natural and Technological Hazards Division, FEMA, Old Federal Office Building, Room 300, 911 Walnut Street, Kansas City, Missouri 64106.

8.0 REFERENCES AND BIBLIOGRAPHY

1. U.S. Army Corps of Engineers, Rock Island District, Upper Mississippi River Water-Surface Profiles, River Mile 0.0 to River Mile 847.5, November 1979.

2. U.S. Army Corps of Engineers, St. Louis District, Flood Plain Information, Ste. Genevieve, Missouri, Mississippi River, North and South Gabouri Creeks, September 1974.

3. U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population, Number of Inhabitants, Missouri, Washington, D.C., February 1982.

4. Missouri Department of Natural Resources, Outdoor Recreation Plan, September 1976.

5. Jefferson County Planning and Zoning Commission, The Quest for Tommorrow: Prologue for a Plan, Volume 1, June 1969.

6. U.S. Water Resources Council, Bulletin No. 17, Guidelines for Determining Flood Flow Frequency, March 1976.

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7. U.S. Department of Commerce, Weather Bureau, Technical Paper No. 40, Rainfall Frequency Atlas of the United States, Washington, D.C., January 1963.

8. U.S. Army Corps of Engineers, Hydrologic Engineering Center, HEC-1 Flood Hydrograph Package, Computer Program 823-X6-L2610, Davis, California, January 1973.

9. ————, Hydrologic Engineering Center, HEC-2 Water-Surface Profiles Generalized Computer Program, Davis, California, November 1976.

10. U.S. Department of Housing and Urban Development, Federal Insurance Administration, Flood Insurance Study, City of Ste. Genevieve, Ste. Genevieve County, Missouri, September 1977.

11. U.S. Geological Survey, 7.5 Minutes Series Topographic Maps, Scale 1:24000, Contour Interval 20 feet: Lithium, Missouri-Illinois, 1970; Kaskaskia, Illinois-Missouri, 1970; Bloomsdale, Missouri-Illinois, 1970; Selma, Illinois-Missouri, 1964; Prairie du Rocher, Illinois-Missouri, 1970; Danby, Missouri, 1964; Farmington, Missouri, 1964; Sprott, Missouri, 1964; Lawrenceton, Missouri, 1964; French Village, Missouri, 1964; Halifax, Missouri, 1964; Weingarten, Missouri, 1980.

12. Federal Emergency Management Agency, Flood Hazard Boundary Map, Ste. Genevieve County, Missouri, September 1981.

13. U.S. Department of Housing and Urban Development, Federal Insurance Administration, Flood Insurance Study, City of St. Marys, Ste. Genevieve County, Missouri, September 1977.

14. Federal Emergency Management Agency, Flood Insurance Study, Jefferson County, Unincorporated Areas, Missouri, May 1983.

15. ————, Flood Insurance Study, Monroe County, Unincorporated Areas, Illinois, in progress.

16. ————, Flood Insurance Study, Randolph County, Unincorporated Areas, Illinois, in progress.

9.0 REVISIONS DESCRIPTION

This section has been added to provide information regarding significant revisions made since the original Flood Insurance Study was printed. Future revisions may be made that do not result in the republishing of the Flood Insurance Study report. To assure that any user is aware of all revisions, it is advisable to contact the community repository of flood hazard data located at the Assessor's Office, Ste. Genevieve County Courthouse, 55 South Third Street, Ste. Genevieve, Missouri.

9.1 First Revision (Revised October 18, 1988)

a. Acknowledgments

The hydraulic analyses for this Revisions Description were performed by the U.S. Army Corps of Engineers (COE), St. Louis District, Missouri. The Federal Emergency Management Agency reviewed and accepted these data for purposes of this revision.

b. Scope

A floodway was added for the entire reach of the Mississippi River within Ste. Genevieve County.

c. Hydrologic and Hydraulic Analyses

The addition of a floodway for the Mississippi River was based on HEC-2 hydraulic analysis (Reference 17) provided by the COE. The floodway was delineated by the COE using topographic maps at a scale of 1:24000 with a contour interval of 20 feet (Reference 18).

d. Floodways

Due to the scope of the previously effective Flood Insurance Study for this community, a floodway was not determined for certain flooding sources. This Revisions Description incorporates the results of the floodway analysis for the Mississippi River into the effective Flood Insurance Study.

Encroachment on floodplains, such as structures and fill, reduces the flood-carrying capacity, increases the flood heights and velocities, and increases flood hazards in areas beyond the encroachment itself. One aspect of floodplain management involves balancing the economic gain from floodplain development against the resulting increase in flood hazard. For purposes of the National Flood Insurance Program, a floodway is used as a tool to assist local communities in this aspect of floodplain management. Under this concept, the area of the 100-year floodplain is divided into a floodway and a floodway fringe. The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 100-year flood can be carried without substantial increases in flood heights. Minimum Federal standards limit such increases to 1.0 foot, provided

that hazardous velocities are not produced. The floodways in this study are presented to local agencies as minimum standards that can be adopted directly or that can be used as a basis for additional floodway studies.

The floodways presented in this study were computed for certain stream segments on the basis of a conveyance reduction from each side of the floodplain. The results of these computations were tabulated at selected cross sections for each stream segment for which a floodway was computed and are presented in Table 3, Floodway Data.

As shown on the Flood Boundary and Floodway Map, the floodway boundaries were computed at cross sections. Between cross sections, the boundaries were interpolated. In cases where the floodway and the 100-year floodplain boundaries are either close together or collinear, only the floodway boundary has been shown. Portions of the floodway of the Mississippi River lie outside the State boundary.

The area between the floodway and the 100-year floodplain boundaries is termed the floodway fringe. The floodway fringe encompasses the portion of the floodplain that could be completely obstructed without increasing the water-surface elevation of the 100-year flood more than 1.0 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to floodplain development are shown in Figure 2.

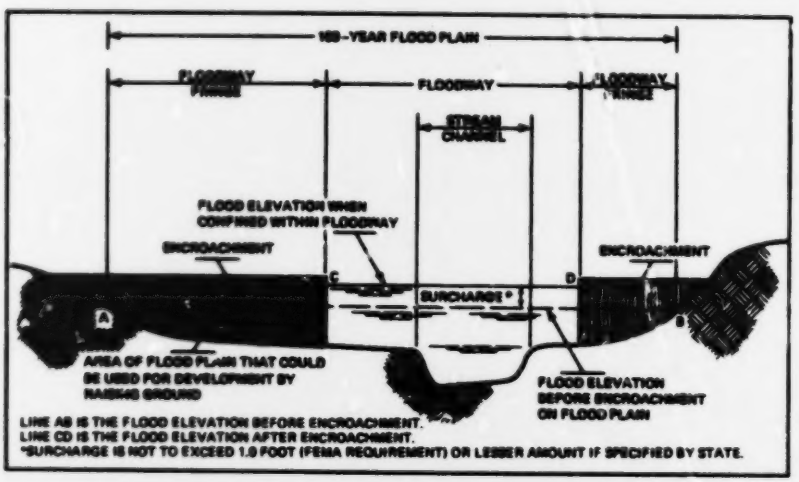
100-YEAR FLOOD PLAIN
FLOODWAY
STREAM CHANNEL
FLOOD ELEVATION WHEN CONFINED WITHIN FLOODWAY
ENCROACHMENT
ENCROACHMENT
C
D
SURCHARGE *
A
B
AREA OF FLOOD PLAIN THAT COULD BE USED FOR DEVELOPMENT BY RAISING GROUND
FLOOD ELEVATION BEFORE ENCROACHMENT ON FLOOD PLAIN
LINE AB IS THE FLOOD ELEVATION BEFORE ENCROACHMENT.
LINE CD IS THE FLOOD ELEVATION AFTER ENCROACHMENT.
*SURCHARGE IS NOT TO EXCEED 1.0 FOOT (FEMA REQUIREMENT) OR LESSER AMOUNT IF SPECIFIED BY STATE.

FIGURE 2 - Floodway Schematic

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FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE[1]	WIDTH[2] (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC.)	REGULATORY (FEET NGVD)	WITHOUT FLOODWAY (FEET NGVD)	WITH FLOODWAY (FEET NGVD)	INCREASE (FEET)
MISSISSIPPI RIVER								
A	119.70	18,586	439,306	2.5	394.7	394.7	395.2	0.5
B	121.58	9277	290,484	3.7	395.2	395.2	395.6	0.4
C	122.66	5364	206,609	5.3	395.5	395.5	395.9	0.4
D	124.80	4495	171,101	6.3	396.0	396.0	396.4	0.4
E	126.50	4794	182,792	5.9	397.0	397.0	397.4	0.4
F	128.50	5697	196,426	5.5	398.8	398.8	399.2	0.4
G	129.80	6468	204,730	5.3	400.1	400.1	400.5	0.4
H	131.30	8290	278,986	3.9	401.0	401.0	401.4	0.4
I	133.30	8466	247,325	4.4	402.0	402.0	402.5	0.5
J	134.40	6517	237,613	4.6	402.5	402.5	403.0	0.5
K	136.00	4959	182,525	5.9	403.4	403.4	403.9	0.5
L	137.50	7138	221,573	4.9	404.4	404.4	404.8	0.4
M	139.00	6870	222,208	4.9	405.3	405.3	405.8	0.5

[1]MILES ABOVE MOUTH OF OHIO RIVER
[2]THIS WIDTH EXTENDS BEYOND STATE BOUNDARY

REVISED: 10/1R/AR

TABLE 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

STE. GENEVIEVE COUNTY, MO
(UNINCORPORATED AREAS)

FLOODWAY DATA

MISSISSIPPI RIVER

e. Other Studies

The Flood Insurance Studies for Jefferson County, Missouri (Reference 19) and the City of St. Mary, Missouri (Reference 20) are being revised in conjunction with this study and will be in agreement with this study. A Flood Insurance Study has been published for the City of Ste. Genevieve, Missouri (Reference 21) and is also in agreement with this revised study.

f. References and Bibliography

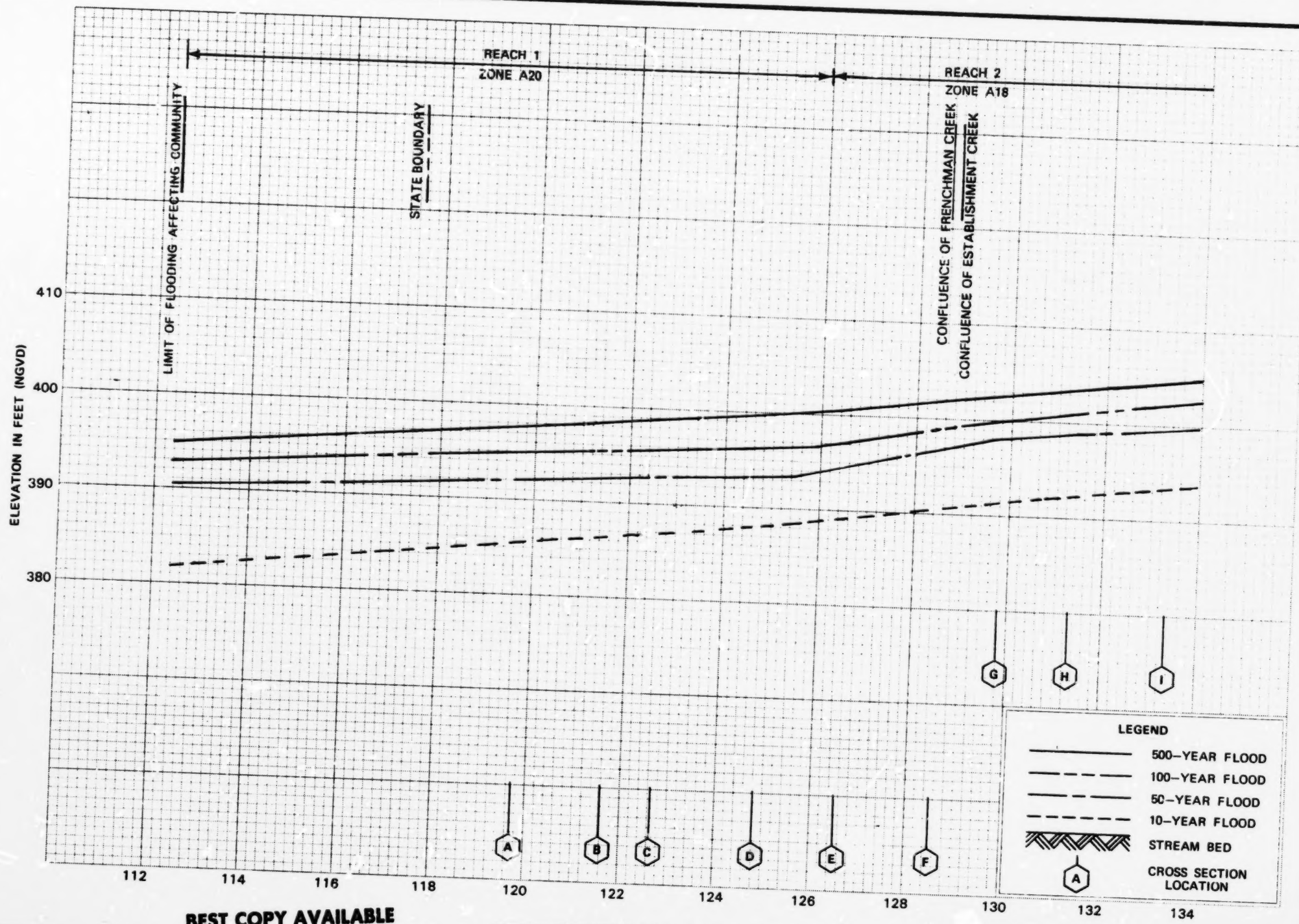
17. U.S. Army Corps of Engineers, Hydrologic Engineering Center, HEC-2 Water-Surface Profiles, Generalized Computer Program, Davis, California, April 1984.

18. U.S. Geological Survey, 7.5 Minute Series Topographic Maps, Scale 1:24000, Contour Interval 20 Feet: Lithium, Missouri-Illinois, 1970, photorevised 1982; Kaskaskia, Illinois-Missouri, 1970, photorevised 1982; Ste Genevieve, Missouri-Illinois, 1979; Prairie DuRocher, Illinois-Missouri, 1970; Bloomsdale, Missouri-Illinois, 1970, photorevised 1982; Danby, Missouri, 1964, photorevised 1982; Selma, Missouri-Illinois, 1964, photorevised 1982.

19. Federal Emergency Management Agency, Flood Insurance Study, Jefferson County, Unincorporated Areas, Missouri, September 1984, revision in progress.

20. U.S. Department of Housing and Urban Development, Federal Insurance Administration, Flood Insurance Study, City of St. Mary, Ste. Genevieve County, Missouri, September 1977, revision in progress.

21. ————, Federal Insurance Administration, Flood Insurance Study, City of Ste. Genevieve, Ste. Genevieve County, Missouri, September 1977.



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FLOOD PROFILES

MISSISSIPPI RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

STE. GENEVIEVE COUNTY, MO

(UNINCORPORATED AREAS)

01P

REVISED: 10/18/88

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STREAM DISTANCE IN MILES ABOVE MOUTH OF OHIO RIVER

FLOOD PROFILES

MISSISSIPPI RIVER

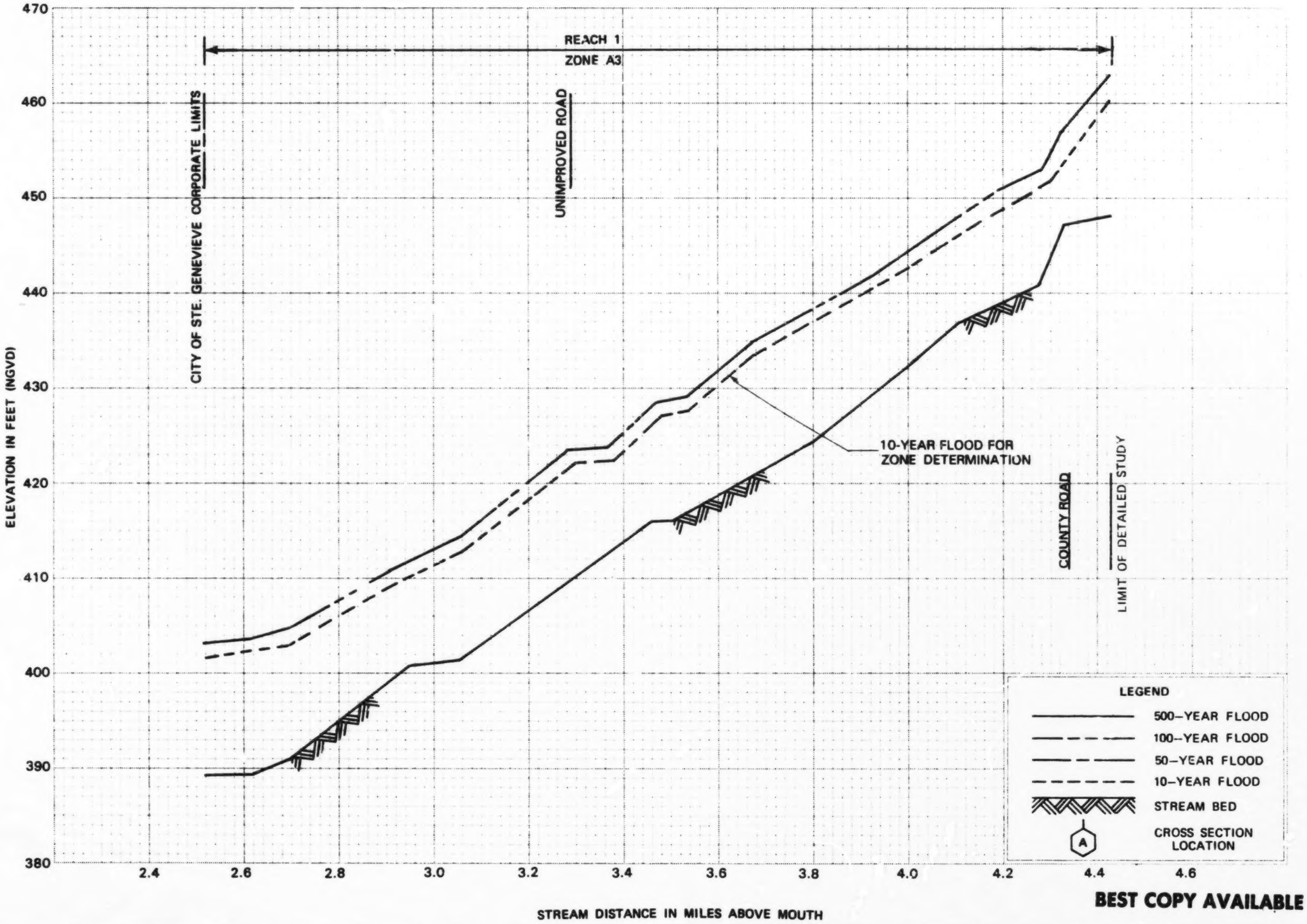
FEDERAL EMERGENCY MANAGEMENT AGENCY

STE. GENEVIEVE COUNTY, MO

(UNINCORPORATED AREAS)

02P

REVISED: 10/18/88



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FLOOD PROFILES

NORTH GABOURI CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

STE. GENEVIEVE COUNTY, MO

(UNINCORPORATED AREAS)

03P

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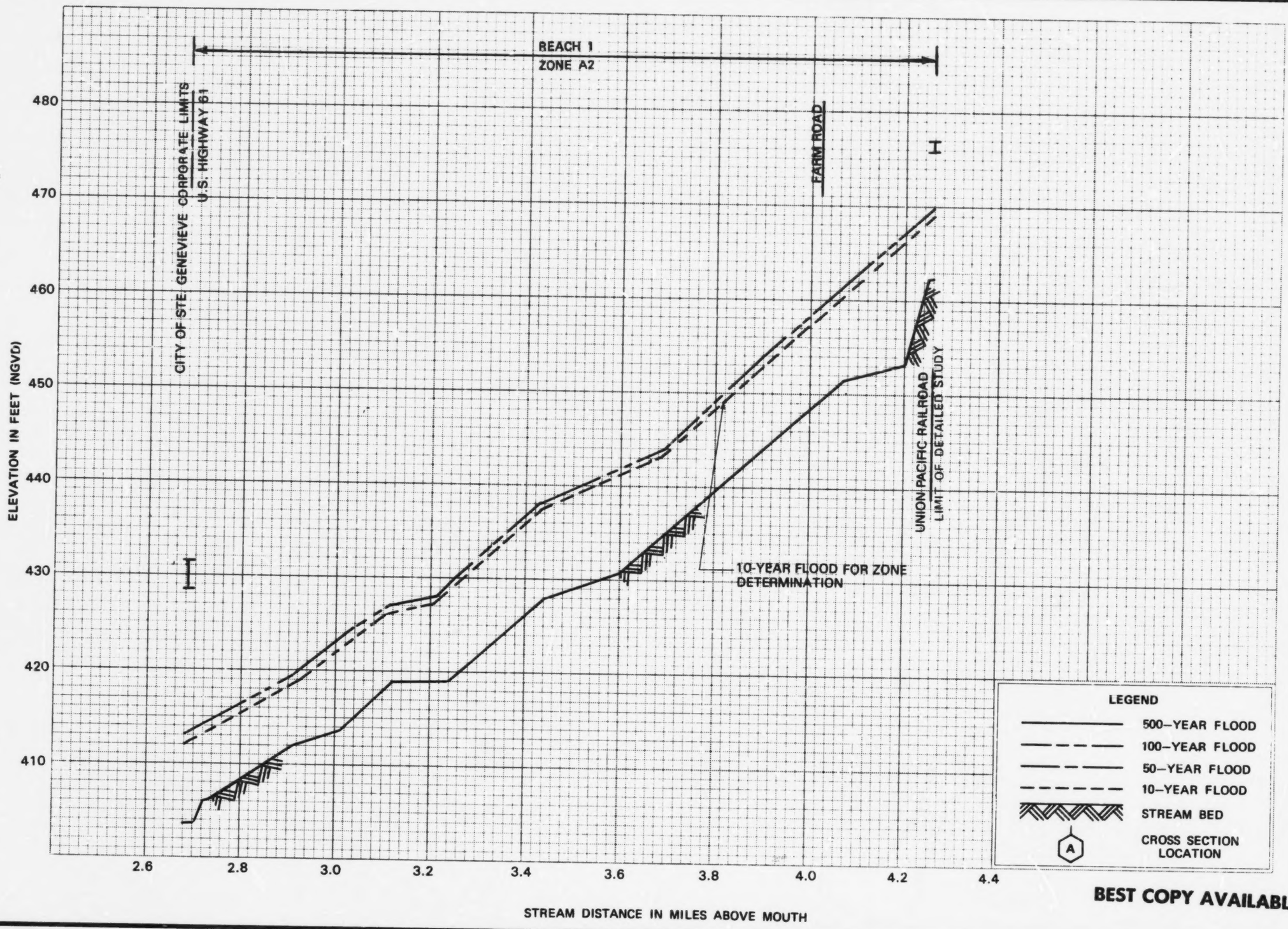

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FLOOD PROFILES

SOUTH GABOURI CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

STE. GENEVIEVE COUNTY, MO

(UNINCORPORATED AREAS)

04P